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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,609	03/15/2004	Rusty Stewart Ashby SR.	018300.001681	2608
24239	7590	09/11/2006	EXAMINER	
MOORE & VAN ALLEN PLLC P.O. BOX 13706 Research Triangle Park, NC 27709			OKEZIE, ESTHER O	
			ART UNIT	PAPER NUMBER
			3652	

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/708,609	ASHBY, RUSTY STEWART	
	Examiner	Art Unit	
	Esther O. Okezie	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-16, 18-26, 28 and 29 is/are allowed.
- 6) ☒ Claim(s) 1-5, 17, 27 and 30-34 is/are rejected.
- 7) ☒ Claim(s) 6-11 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The amendment filed on 6/22/06 and the remarks presented therewith have carefully considered. Applicant's arguments with respect to the claims have been considered but they are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1,3,30, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Willis.
2. Re claims 1 and 30, Willis discloses a frame (including collar 100 fastened directly to plate 122; see col. 7, lines 15-30) disposable on an article to be lifted (plate 122 engages the drill pipe 30 that is to be lifted) and including at least two fulcrums (85) distributed generally symmetrically around the frame, wherein the parts are substantially fixed relative to each other; at least two lifting arms (70) each pivotally mounted to a corresponding fulcrum, each lifting arm having a lower end (74) extending lower than the fulcrum and an upper end (84) extending above the fulcrum; and a central exertion member (cam body 50) including a top surface having one sloped portion (58) for each

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lifting arm, the top surface of each sloped portion being downwardly inclined from the center of the exertion member and below the upper ends of the respective lifting arms to apply force (see upward arrow on power swivel 20 in fig 2) to the upper ends of the lifting arms upon application of upward force to the exertion member.

3. Re claims 3 and 32, Willis discloses the exertion member engages the upper ends of the lifting arms in a manner selected from the group consisting of sliding engagement and rolling engagement (Abstract).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willis in view of Reynolds US 2,576,193. Willis discloses the lower end of each lifting arm is adapted to contact the article in an engaged position (fig 2), and wherein upon application of upward force (see upward arrow on power swivel 20 in fig 2) to the exertion member the lifting arms rotate around the corresponding fulcrum from the retracted position to the engaged position (fig 2). Willis discloses that prior to lifting, the device is suspended above the object to be lifted (drill pipe 30) in a closed position (fig

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7; col. 5, lines 35-42), then the device is lowered over the drill pipe and the edges of the jaws come into contact with the surfaces of the drill pipe thereby causing the jaws to open (figs 8 and 9; col. 5, lines 43-46). Finally an upward force (upwards arrow in fig 2) is applied to allow the jaws to grip the pipe and lift it. Therefore Willis does not disclose the jaws biased to a retracted/open position in the absence of an external force, because the jaws are formerly closed then biased open by the surface of the drill pipe prior to lifting.

Reynolds discloses a barrel grapple including three arms that are retracted or opened over the barrel prior to the application of a force to move the gripping plates (28) of the arms into gripping engagement (see figures 1 and 3; col. 2, lines 1-4). It would have been obvious to one of ordinary skill at the time of the invention to modify the device of Willis so that the jaws are bias open prior to lifting the device and in the absence of external forces as taught by Reynolds in order to easily move the device over objects and lift in one step eliminating the steps of first opening the device then closing and finally opening again.

5. Claims 5, 17, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willis in view of Carpenter US 3,451,711.

6. Re claims 5 and 34, Willis discloses load bearing means (swivel saver sub 20) mounted on cam body (50) and adapted to receive lifting means (col. 3, lines 40-56) and not mounted to the frame that is disposed over the article (30) to be lifted. Willis discloses several alternate arrangements for the device (col. 7, lines 5-30). Carpenter

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discloses a pipe handling apparatus including a fixed frame (vertical support 11 fixed to horizontal support arms 12 and 13) disposed on the article to be lifted with a load bearing means (32) mounted to the upper portion of the frame and adapted to receive a lifting means (see hook above ring 32). It would have been obvious to one of ordinary skill at the time of the invention to modify the arrangement of Willis by mounting the load bearing means to the frame as taught by Carpenter in order to simplify the arrangement.

7. Re claim 17, Willis discloses inserts (74) for centering and aligning the frame on the article (col. 5, lines 52-56), however the inserts (74) are not mounted to the frame. Carpenter discloses a pipe handling apparatus including a fixed frame (vertical support 11 fixed to horizontal support arms 12 and 13) disposed on the article to be lifted with tubular guide members (21) mounted to the frame that align the frame over the article (also see pad members 15 and 16; figs 1 and 2). It would have been obvious to one of ordinary skill at the time of the invention to modify the device of Willis to include guide members mounted to the frame as taught by Carpenter in order to align the object to be lifted relative to the frame prior to lifting.

8. Claims 4 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willis in view of Anderson US 3,915,488. Willis discloses the at least two lifting arms (70) each comprise an approximately vertical portion (80) outside of the frame mounted to an approximately horizontal portion (84) extending outward from the exertion member to the upper end of the respective vertical portions. The approximately vertical portions (80) and approximately horizontal portions (84) of lifting arms or jaws 70 are angled

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upward during various lifting positions and do not remain approximately horizontal and approximately vertical at all times through various positions.

Anderson discloses a barrel-lifting device including a frame (support members 22-26) wherein the lifting arms have approximately vertical (40) and horizontal (46) portions that remain as such during various lifting positions (see figure 3, lines in phantom and solid). It would have been obvious to one of ordinary skill at the time of the invention to design the lifting arms of Willis so that the arms remain approximately vertical and horizontal during various lifting positions as a matter of design choice. Applicant has not disclosed that this amended limitation provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore would have expected Applicant's invention to perform equally well without the vertical and horizontal portions of the lifting arms remaining as such during various lifting positions because the lifting arms of Willis are just as capable in lifting objects even though the arms vary in angle during lifting.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willis in view of Reynolds US 2,576,193. Willis discloses a method of making a lifting apparatus comprising; assembling a frame (including collar 100 fastened directly to plate 122; see col. 7, lines 15-30) disposable on an article to be lifted and including parts including at least two fulcrums (85) distributed generally symmetrically around the frame wherein the parts are substantially fixed relative to each other; pivotally mounting a lifting arm (70) to

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each fulcrum, each lifting arm having a lower end extending lower than the fulcrum and an upper end extending above the fulcrum, wherein the lower end of each Lifting arm is adapted not to contact the article in a retracted position and to contact the article in an engaged position; providing a central exertion member (50) including a top surface having one sloped portion for each lifting arm, the top surface inclined from of each sloped portion being downwardly in the center of the exertion member and below the upper ends of the respective Lifting arms to apply force to the upper ends of the Lifting arms upon application of upward force to the exertion member to rotate each Lifting arm around the corresponding fulcrum from the retracted position to the engaged position (see figs 1-9). Willis discloses the Lower end of each Lifting arm is adapted to contact the article in an engaged position (fig 2), and wherein upon application of upward force (see upward arrow on power swivel 20 in fig 2) to the exertion member the Lifting arms rotate around the corresponding fulcrum from the retracted position to the engaged position (fig 2). Willis discloses that prior to lifting, the device is suspended above the object to be lifted (drill pipe 30) in a closed position (fig 7; col. 5, lines 35-42), then the device is lowered over the drill pipe and the edges of the jaws come into contact with the surfaces of the drill pipe thereby causing the jaws to open (figs 8 and 9; col. 5, lines 43-46). Finally an upward force (upwards arrow in fig 2) is applied to allow the jaws to grip the pipe and lift it. Therefore Willis does not disclose the jaws biased to a retracted/open position in the absence of an external force, because the jaws are formerly closed then biased open by the surface of the drill pipe prior to lifting.

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Reynolds discloses a barrel grapple including three arms that are retracted or opened over the barrel prior to the application of a force to move the gripping plates (28) of the arms into gripping engagement (see figures 1 and 3; col. 2, lines 1-4). It would have been obvious to one of ordinary skill at the time of the invention to modify the device of Willis so that the jaws are bias open prior to lifting the device and in the absence of external forces as taught by Reynolds in order to easily move the device over objects and lift in one step eliminating the steps of first opening the device then closing and finally opening again.

Allowable Subject Matter

Claims 12-16, 18-26, 28, and 29 are allowed.

Claims 6-11 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Esther O. Okezie whose telephone number is (571) 272-8108. The examiner can normally be reached on Mon-Thurs 8-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EOO 9/1/06



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